Freeform Search

Database: US Pre-Grant Publication Full-Text Database
US Patents Full-Text Database
US OCR Full-Text Database
EPO Abstracts Database
JPO Abstracts Database
Derwent World Patents Index
IBM Technical Disclosure Bulletins

Term: 19 and extracellular

Display: 100 **Documents in Display Format:** - **Starting with Number** 1

Generate: ○ Hit List ◉ Hit Count ○ Side by Side ○ Image

Search Clear Interrupt

Search History

DATE: Saturday, August 20, 2005 Printable Copy Create Case

Set Name side by side	Query	Hit Count	Set Name result set
DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD; PLUR=YES; OP=OR			
L17	tumor near5 (epitop$ or antigen$) near10 fus$ near10 (cytokine$ or IL-2 or IL-4 or interleukin$ or interferon$)	8	L17
L16	tumor near5 (epitop$ or antigen$) near10 (cytokine$ or IL-2 or IL-4 or interleukin$ or interferon$)	1130	L16
L15	il-2 near5 anti-tumor	151	L15
L14	neu near10 IL-2 near20 (fusion or fused or fus$)	4	L14
L13	neu near10 IL-2	19	L13
L12	L11 and fus$	1	L12
L11	20020193329	2	L11
DB=PGPB,USPT,EPAB,JPAB,DWPI,TDBD; PLUR=YES; OP=OR			
L10	l9 and extracellular	7	L10
DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD; PLUR=YES; OP=OR			
L9	DNA near5 vaccine$ near20 neu	11	L9
L8	l5 and N near terminal	0	L8
L7	L5 and (cancer near vaccine$ or DNA near vaccine$)	0	L7

L6	L5 and neu near10 extracellular	2	L6
L5	20040052811	2	L5
L4	(DNA near5 vaccine$ or cancer near5 vaccine$) near20 N near neu	2	L4
L3	(DNA near5 vaccine$ or cancer near5 vaccine$) near20 neu near10 extracellular	2	L3
L2	(DNA near5 vaccine$ or cancer near5 vaccine$) near20 neu	63	L2
L1	(DNA near5 vaccine$ or cancer near5 vaccine$) near20 (oncogene$ or neu)	100	L1

END OF SEARCH HISTORY

```
BEGIN 5,6,55,154,155,156,312,399,BIOTECH,BIOSCI
>>>         135 is unauthorized
```

Welcome to DialogClassic Web(tm)

```
 Dialog level 05.06.01D
Last logoff:  16aug05 16:11:55
Logon file001 20aug05 16:01:32
          *** ANNOUNCEMENT ***
                    ***
--UPDATED: Important Notice to Freelance Authors--
See HELP FREELANCE for more information
                    ***
NEW FILES RELEASED
***Computer and Information Systems Abstracts (File 56)
***Electronics and Communicationss Abstracts (File 57)
***Solid State and Superconductivity Abstracts (File 68)
***ANTE: Abstracts in New Technologies (File 60)
***Civil Engineering Abstracts (File 61)
***Aluminium Industry Abstracts (File 33)
***Ceramic Abstracts/World Ceramic Abstracts (File 335)
***CSA Life Sciences Abstracts (File 24)
***Corrosion Abstracts (File 46)
***Materials Business File (File 269)
***Engineered Materials Abstracts (File 293)
***CSA Aerospace & High Technology Database (File 108)
***CSA Technology Research Database (File 23)
***METADEX(r) (File 32)
***FDAnews (File 182)
***German Patents Fulltext (File 324)                    ***
RESUMED UPDATING
***Canadian Business and Current Affairs (262)
***CorpTech (559)
                    ***
Chemical Structure Searching now available in Prous Science Drugs
of the Future (F453), IMS R&D Focus (F445), Beilstein Facts (F390),
and Derwent Chemistry Resource (F355).
                    ***
     >>> Enter BEGIN HOMEBASE for Dialog Announcements <<<
     >>>    of new databases, price changes, etc.      <<<
                    ****
 * * *

File   1:ERIC 1966-2004/Jul 21
       (c) format only 2004 Dialog
 *File   1: Updates suspended by ERIC until
Q3, 2005

      Set  Items  Description
      ---  -----  -----------
Cost is in DialUnits
?

BEGIN 5,6,55,154,155,156,312,399,BIOTECH,BIOSCI
>>>         135 is unauthorized
>>>1 of the specified files is not available
       20aug05 16:01:55 User208738 Session D1081.1
             $0.80    0.228 DialUnits File1
     $0.80  Estimated cost File1
     $0.10  INTERNET
     $0.90  Estimated cost this search
     $0.90  Estimated total session cost   0.228 DialUnits

SYSTEM:OS  - DIALOG OneSearch
```

File 5:Biosis Previews(R) 1969-2005/Aug W2
(c) 2005 BIOSIS
File 6:NTIS 1964-2005/Aug W1
(c) 2005 NTIS, Intl Cpyrght All Rights Res
File 55:Biosis Previews(R) 1993-2005/Aug W2
(c) 2005 BIOSIS
File 154:MEDLINE(R) 1990-2005/Aug W3
(c) format only 2005 Dialog
File 155:MEDLINE(R) 1951-2005/Aug W3
(c) format only 2005 Dialog
File 156:ToxFile 1965-2005/Aug W3
(c) format only 2005 Dialog
***File 156: ToxFile has been reloaded with the 2005 MeSH.**
Please see HELP NEWS 156 for details.
File 312:CA SEARCH(R) 1987-1991
(c) 1997 American Chemical Society
***File 312: Use is subject to the terms of your user/customer agreement.**
File 399:CA SEARCH(R) 1967-2005/UD=14308
(c) 2005 American Chemical Society
***File 399: Use is subject to the terms of your user/customer agreement.**
Alert feature enhanced for multiple files, etc. See HELP ALERT.
File 8:Ei Compendex(R) 1970-2005/Aug W1
(c) 2005 Elsevier Eng. Info. Inc.
File 24:CSA Life Sciences Abstracts 1966-2005/Jul
(c) 2005 CSA.
File 34:SciSearch(R) Cited Ref Sci 1990-2005/Aug W2
(c) 2005 Inst for Sci Info
File 65:Inside Conferences 1993-2005/Aug W2
(c) 2005 BLDSC all rts. reserv.
File 71:ELSEVIER BIOBASE 1994-2005/Aug W1
(c) 2005 Elsevier Science B.V.
File 73:EMBASE 1974-2005/Aug 19
(c) 2005 Elsevier Science B.V.
File 94:JICST-EPlus 1985-2005/Jun W4
(c)2005 Japan Science and Tech Corp(JST)
File 98:General Sci Abs/Full-Text 1984-2004/Dec
(c) 2005 The HW Wilson Co.
File 99:Wilson Appl. Sci & Tech Abs 1983-2005/Jul
(c) 2005 The HW Wilson Co.
File 136:BioEngineering Abstracts-1966-2005/Jul (c) 2005 CSA.
File 143:Biol. & Agric. Index 1983-2005/Jul
(c) 2005 The HW Wilson Co
File 144:Pascal 1973-2005/Aug W1
(c) 2005 INIST/CNRS
File 172:EMBASE Alert 2005/Aug 19
(c) 2005 Elsevier Science B.V.
File 266:FEDRIP 2005/Jun
Comp & dist by NTIS, Intl Copyright All Rights Res
File 315:ChemEng & Biotec Abs 1970-2005/Jul
(c) 2005 DECHEMA
File 357:Derwent Biotech Res. _1982-2005/Aug W2
(c) 2005 Thomson Derwent & ISI
File 358:Current BioTech Abs 1983-2005/Jul
(c) 2005 DECHEMA
File 369:New Scientist 1994-2005/Jun W1
(c) 2005 Reed Business Information Ltd.
File 370:Science 1996-1999/Jul W3
(c) 1999 AAAS
***File 370: This file is closed (no updates). Use File 47 for more current** information.

```
  File 434:SciSearch(R) Cited Ref Sci 1974-1989/Dec
         (c) 1998 Inst for Sci Info
  File  35:Dissertation Abs Online 1861-2005/Jul
         (c) 2005 ProQuest Info&Learning
  File  40:Enviroline(R) 1975-2005/Jul
  File  50:CAB Abstracts 1972-2005/Jul
         (c) 2005 CAB International
  File  91:MANTIS(TM) 1880-2005/Jun
         2001 (c) Action Potential
  File 110:WasteInfo 1974-2002/Jul
         (c)  2002 AEA Techn Env.
 *File 110: This file is closed (no updates)
  File 164:Allied & Complementary Medicine 1984-2005/Aug
         (c) 2005 BLHCIS
  File 185:Zoological Record Online(R) 1978-2005/Aug
         (c) 2005 BIOSIS
  File 391:Beilstein Reactions 2005/Q2
         (c) 2005 Beilstein GmbH
  File 467:ExtraMED(tm) 2000/Dec
         (c) 2001 Informania Ltd.
 *File 467: F467 no longer updates; see Help News467.                    7.

      Set  Items  Description
      ---  -----  -----------
?

S (CYTOKINE? OR IL-2 OR INTERLEUKIN? OR IL-4) (5N) (FUSION OR FUSED) (5N) TUMOR?
Processed  10 of  37 files ...
Processing
Completed processing all files
         1293611  CYTOKINE?
            9167  IL-2
         1319538  INTERLEUKIN?
            8241  IL-4
         1223331  FUSION
          340350  FUSED
         5921379  TUMOR?
      S1    1553  (CYTOKINE? OR IL-2 OR INTERLEUKIN? OR IL-4) (5N) (FUSION
                  OR FUSED) (5N) TUMOR?
?

S (CYTOKINE? OR IL-2 OR INTERLEUKIN? OR IL-4) (5N) (FUSION OR FUSED) (5N) TUMOR? (5N
Processing
Processed  10 of  37 files ...
Completed processing all files
         1293611  CYTOKINE?
            9167  IL-2
         1319538  INTERLEUKIN?
            8241  IL-4
         1223331  FUSION
          340350  FUSED
         5921379  TUMOR?
          475979  EPITOP?
         3796388  ANTIGEN?
      S2     389  (CYTOKINE? OR IL-2 OR INTERLEUKIN? OR IL-4) (5N) (FUSION
                  OR FUSED) (5N) TUMOR? (5N) (EPITOP? OR ANTIGEN?)
?

S S2 AND DNA (N) VACCINE?
Processed  20 of  37 files ...
```

```
Processing
Completed processing all files
             389  S2
         6719925  DNA
          854500  VACCINE?
           35942  DNA(N)VACCINE?
      S3      16  S2 AND DNA (N) VACCINE?
?
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?

RD S3
>>>Duplicate detection is not supported for File 391.

>>>Records from unsupported files will be retained in the RD set.
...completed examining records
      S4       9  RD S3 (unique items)
?

>>>'S4.3.1' not recognized as set or accession number
?
```

Display 4/3/1 (Item 1 from file: 154)

```
DIALOG(R)File 154:MEDLINE(R)
(c) format only 2005 Dialog. All rts. reserv.

13904165   PMID: 11591784
```

A dual-function DNA vaccine encoding carcinoembryonic antigen and CD40 ligand trimer induces T cell-mediated protective immunity against colon cancer in carcinoembryonic antigen-transgenic mice.

```
  Xiang R; Primus F J; Ruehlmann J M; Niethammer A G; Silletti S; Lode H N;
Dolman C S; Gillies S D; Reisfeld R A
  Department of Immunology, The Scripps Research Institute, La Jolla, CA
92037, USA.
  Journal of immunology (Baltimore, Md. - 1950) (United States) Oct 15
2001, 167 (8) p4560-5, ISSN 0022-1767 Journal Code: 2985117R
  Contract/Grant No.: CA70320; CA; NCI; CA83856; CA; NCI
  Publishing Model Print
  Document type: Journal Article
  Languages: ENGLISH
  Main Citation Owner: NLM

                                   -more-
?
```

Display 4/3/1 (Item 1 from file: 154)

DIALOG(R)File 154:MEDLINE(R)

Record type: MEDLINE; Completed

- end of record -

?

Display 4/3/2 (Item 2 from file: 154)
DIALOG(R)File 154:MEDLINE(R)

13834598 PMID: 11507070
Targeted interleukin 2 therapy enhances protective immunity induced by an autologous oral DNA vaccine against murine melanoma.
Niethammer A G; Xiang R; Ruehlmann J M; Lode H N; Dolman C S; Gillies S D ; Reisfeld R A
Department of Immunology, The Scripps Research Institute, La Jolla, California 92037, USA.
Cancer research (United States) Aug 15 2001, 61 (16) p6178-84, ISSN 0008-5472 Journal Code: 2984705R
Publishing Model Print
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: MEDLINE; Completed

- end of record -

?

Display 4/9/2 (Item 2 from file: 154)
DIALOG(R)File 154:MEDLINE(R)

13834598 PMID: 11507070
Targeted interleukin 2 therapy enhances protective immunity induced by an autologous oral DNA vaccine against murine melanoma.
Niethammer A G; Xiang R; Ruehlmann J M; Lode H N; Dolman C S; Gillies S D ; Reisfeld R A
Department of Immunology, The Scripps Research Institute, La Jolla, California 92037, USA.
Cancer research (United States) Aug 15 2001, 61 (16) p6178-84, ISSN 0008-5472 Journal Code: 2984705R
Publishing Model Print
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: MEDLINE; Completed
Subfile: INDEX MEDICUS

-more-

?

Display 4/9/2 (Item 2 from file: 154)
DIALOG(R)File 154:MEDLINE(R)

We demonstrate that a mouse-human chimeric anti-ganglioside GD2-interleukin (IL)-2 fusion protein (ch14.18-IL2) substantially amplifies tumor-protective immunity against murine melanoma induced by an autologous oral DNA vaccine containing the murine ubiquitin gene fused to murine melanoma peptide epitopes gp100(25-35) and TRP-2(181-188). This combination

therapy led to the complete rejection of a lethal challenge with B78D14 murine melanoma cells in six of eight mice and a marked suppression of s.c. tumor growth in the two remaining animals. The tumor-protective immunity was mediated by MHC class I antigen- restricted CD8(+) T cells together with CD4(+) T cell help, which was required only for tumor cell killing in the effector phase of the immune response. A single oral vaccination with the DNA vaccine, which was carried by attenuated Salmonella typhimurium, was equally as effective as three such vaccinations applied at 2-week intervals. The immunological mechanisms involved in this antitumor effect were suggested by a decisively increased secretion of tumor necrosis factor alpha TNFTnTNa and IFN-gamma from CD4(+) and CD8(+) T cells and a markedly

-more-

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Display 4/9/2 (Item 2 from file: 154)

up-regulated expression on CD8(+) T cells of high-affinity IL-2 receptor alpha chain (CD25), costimulatory molecule CD28, and adhesion molecule lymphocyte function-associated antigen-2 (LFA-2/CD2). Additionally, the combination therapy induced increased expression of costimulatory molecules B7.1 and CD48 on murine antigen-presenting cells. Taken together, our results suggest that IL-2 targeted to the tumor microenvironment by a specific antibody-IL-2 fusion protein is a potent enhancer of tumor-protective immunity induced by an oral DNA vaccine that may ultimately enhance the chances of success in its clinical application.

Tags: Comparative Study; Female

Descriptors: *Immunotoxins--immunology--IM; *Interleukin-2--immunology --IM; *Melanoma, Experimental--immunology--IM; *Melanoma, Experimental --prevention and control--PC; *Vaccines, DNA--immunology--IM; Administration, Oral; Animals; Antigens, CD80--biosynthesis--BI; CD4-Positive T-Lymphocytes--drug effects--DE; CD4-Positive T-Lymphocytes --immunology--IM; CD4-Positive T-Lymphocytes--secretion--SE; CD8-Positive

-more-

?

Display 4/9/2 (Item 2 from file: 154)

T-Lymphocytes--drug effects--DE; CD8-Positive T-Lymphocytes--immunology --IM; CD8-Positive T-Lymphocytes--secretion--SE; Chimeric Proteins --administration and dosage--AD; Chimeric Proteins--immunology--IM; Drug Synergism; Epitopes--immunology--IM; Gangliosides--immunology--IM; Humans; Immunotoxins--administration and dosage--AD; Interferon Type II--secretion --SE; Interleukin-2--administration and dosage--AD; Intramolecular Oxidoreductases--immunology--IM; Lymphocyte Activation--immunology--IM; Membrane Glycoproteins--immunology--IM; Mice; Mice, Inbred C57BL; Mice, Knockout; Neoplasm Proteins--immunology--IM; Peptide Fragments--immunology --IM; Recombinant Fusion Proteins--immunology--IM; Tumor Necrosis Factor-alpha--secretion--SE; Vaccines, DNA--administration and dosage--AD

CAS Registry No.: 0 (Antigens, CD80); 0 (Chimeric Proteins); 0 (Epitopes); 0 (Gangliosides); 0 (Immunotoxins); 0 (Interleukin-2); 0 (Membrane Glycoproteins); 0 (Neoplasm Proteins); 0 (Peptide Fragments) ; 0 (Recombinant Fusion Proteins); 0 (Tumor Necrosis Factor-alpha); 0 (Vaccines, DNA); 0 (melanocyte lineage-specific antigen gp100);

-more-

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Display 4/9/2 (Item 2 from file: 154)
DIALOG(R)File 154:MEDLINE(R)

65988-71-8 (ganglioside, GD2); 82115-62-6 (Interferon Type II)
Enzyme No.: EC 5.3 (Intramolecular Oxidoreductases); EC 5.3.3.12 (dopachrome isomerase)
Record Date Created: 20010816
Record Date Completed: 20010906

- end of record -

?

Display 4/9/3 (Item 3 from file: 154)
DIALOG(R)File 154:MEDLINE(R)

13660320 PMID: 11300483
Protective immunity against human carcinoembryonic antigen (CEA) induced by an oral DNA vaccine in CEA-transgenic mice.
Xiang R; Silletti S; Lode H N; Dolman C S; Ruehlmann J M; Niethammer A G; Pertl U; Gillies S D; Primus F J; Reisfeld R A
Department of Immunology, The Scripps Research Institute, La Jolla, California 92037, USA.
Clinical cancer research - an official journal of the American Association for Cancer Research (United States) Mar 2001, 7 (3 Suppl) p856s-864s, ISSN 1078-0432 Journal Code: 9502500
Contract/Grant No.: CA42508; CA; NCI; CA70320; CA; NCI; CA83856; CA; NCI
Publishing Model Print
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM

-more-

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Display 4/9/3 (Item 3 from file: 154)
DIALOG(R)File 154:MEDLINE(R)

Record type: MEDLINE; Completed
Subfile: INDEX MEDICUS
Peripheral T-cell tolerance toward human carcinoembryonic self-antigen (CEA) was broken in CEA-transgenic C57BL/6J mice by an oral CEA-based DNA vaccine. This vaccine, delivered by the live, attenuated AroA- strain of Salmonella typhimurium (SL7207), induced tumor-protective immunity mediated by MHC class I-restricted CD8+ T cells. Activation of these T cells was indicated by increased secretion of proinflammatory cytokines IFN-gamma, interleukin (IL)-12 and granulocyte/macrophage-colony stimulating factor, as well as specific tumor rejection and growth suppression in vaccinated CEA-transgenic mice after a lethal challenge with murine MC38 colon carcinoma cells. These tumor cells were double transfected with CEA and the human epithelial cell adhesion molecule (Ep-CAM)/KSA and consequently served as a docking site for a recombinant antibody-IL2 fusion protein (KS1/4-IL2) recognizing KSA. Importantly, the efficacy of the tumor-protective immune response was markedly increased by boosts with this

-more-

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Display 4/9/3 (Item 3 from file: 154)

DIALOG(R)File 154:MEDLINE(R)

antibody-IL2 fusion protein, resulting in more effective tumor rejection coupled with increased expression of costimulatory molecules B7.2/B7.2 and intercellular adhesion molecule 1 (ICAM-1) on dendritic cells and intensified release of proinflammatory cytokines IFN-gamma, IL-12, and granulocyte/macrophage-colony stimulating factor from T cells of successfully vaccinated CEA-transgenic C57BL/6J mice. Increased T-cell activation mediated by boosts with KS1/4-IL2 fusion protein after tumor cell challenge was further indicated by expanded expression of T-cell activation markers CD25, CD28, CD69, and LFA-1. The application of such CEA-based DNA vaccines and its further improved versions may ultimately prove useful in combination therapies directed against human carcinomas expressing CEA self-antigens.

Tags: Research Support, Non-U.S. Gov't; Research Support, U.S. Gov't, P.H.S.

Descriptors: *Cancer Vaccines; *Carcinoembryonic Antigen--metabolism--ME; *Vaccines, DNA; Animals; Antigens, Neoplasm--metabolism--ME; Cell Adhesion

-more-

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Display 4/9/3 (Item 3 from file: 154)

DIALOG(R)File 154:MEDLINE(R)

Molecules--metabolism--ME; Colonic Neoplasms--metabolism--ME; Cytokines --metabolism--ME; Granulocyte-Macrophage Colony-Stimulating Factor --metabolism--ME; Humans; Immunoblotting; Intercellular Adhesion Molecule-1 --metabolism--ME; Interferon Type II--metabolism--ME; Interleukin-12 --metabolism--ME; Mice; Mice, Inbred C57BL; Mice, Transgenic; Plasmids --metabolism--ME; Recombinant Fusion Proteins--metabolism--ME; Transfection ; Tumor Cells, Cultured; Up-Regulation

CAS Registry No.: 0 (Antigens, Neoplasm); 0 (Cancer Vaccines); 0 (Carcinoembryonic Antigen); 0 (Cell Adhesion Molecules); 0 (Cytokines) ; 0 (Plasmids); 0 (Recombinant Fusion Proteins); 0 (Vaccines, DNA); 0 (tumor-associated antigen GA733); 126547-89-5 (Intercellular Adhesion Molecule-1); 187348-17-0 (Interleukin-12); 82115-62-6 (Interferon Type II); 83869-56-1 (Granulocyte-Macrophage Colony-Stimulating Factor)

Record Date Created: 20010412

Record Date Completed: 20010823

- end of record -

?

Display 4/9/4 (Item 4 from file: 154)

DIALOG(R)File 154:MEDLINE(R)

13200429 PMID: 11249681

Cytokine gene-engineered vaccines.

Forni G; Boggio K

Department of Clinical and Biological Sciences, University of Turin, Ospedale San Luigi Gonzaga, 10043 Orbassano, Italy. forni@pasteur.sluigi.unito.it

Current opinion in molecular therapeutics (England) Feb 1999, 1 (1) p34-8, ISSN 1464-8431 Journal Code: 100891485

Publishing Model Print

Document type: Journal Article; Review; Review, Tutorial

Languages: ENGLISH

Main Citation Owner: NLM

Record type: MEDLINE; Completed
Subfile: INDEX MEDICUS
Cytokines modulate immune reactivity and have therefore been used to

-more-

?

Display 4/9/4 (Item 4 from file: 154)
DIALOG(R)File 154:MEDLINE(R)
(c) format only 2005 Dialog. All rts. reserv.
build cancer vaccines. Experimental vaccination of rodents and humans with cytokine-gene engineered tumor cells, fusion proteins between cytokines and tumor antigens, and their DNA have been shown to induce a significant immune memory, even against poorly immunogenic tumors. This immune memory can prevent tumor growth and cure initial metastases, but is poorly effective against established tumors. To date clinical trials have been confined to patients with advanced tumors; so far they suggest that this approach is safe. (36 Refs.)
Descriptors: *Cancer Vaccines--pharmacology--PD; *Cytokines--genetics--GE ; *Vaccines, DNA--pharmacology--PD; Adjuvants, Immunologic--genetics--GE; Adjuvants, Immunologic--therapeutic use--TU; Animals; Cancer Vaccines --genetics--GE; Clinical Trials; Cytokines--therapeutic use--TU; Genetic Engineering; Humans; Immunologic Memory--genetics--GE; Neoplasms--genetics --GE; Neoplasms--immunology--IM; Neoplasms--therapy--TH; Recombinant Fusion Proteins--genetics--GE; Recombinant Fusion Proteins--therapeutic use--TU; Vaccines, DNA--genetics--GE; Vaccines, Synthetic--genetics--GE;

-more-

?

Display 4/9/4 (Item 4 from file: 154)
DIALOG(R)File 154:MEDLINE(R)
(c) format only 2005 Dialog. All rts. reserv.

13200429 PMID: 11249681
Cytokine gene-engineered vaccines.
Forni G; Boggio K
Department of Clinical and Biological Sciences, University of Turin, Ospedale San Luigi Gonzaga, 10043 Orbassano, Italy. forni@pasteur.sluigi.unito.it
Current opinion in molecular therapeutics (England) Feb 1999, 1 (1) p34-8, ISSN 1464-8431 Journal Code: 100891485
Publishing Model Print
Document type: Journal Article; Review; Review, Tutorial
Languages: ENGLISH
Main Citation Owner: NLM
Record type: MEDLINE; Completed
Subfile: INDEX MEDICUS
Cytokines modulate immune reactivity and have therefore been used to

-more-

?

Display 4/9/4 (Item 4 from file: 154)
DIALOG(R)File 154:MEDLINE(R)
(c) format only 2005 Dialog. All rts. reserv.
build cancer vaccines. Experimental vaccination of rodents and humans with cytokine-gene engineered tumor cells, fusion proteins between cytokines and tumor antigens, and their DNA have been shown to induce a significant immune memory, even against poorly immunogenic tumors. This immune memory

can prevent tumor growth and cure initial metastases, but is poorly effective against established tumors. To date clinical trials have been confined to patients with advanced tumors; so far they suggest that this approach is safe. (36 Refs.)
Descriptors: *Cancer Vaccines--pharmacology--PD; *Cytokines--genetics--GE ; *Vaccines, DNA--pharmacology--PD; Adjuvants, Immunologic--genetics--GE; Adjuvants, Immunologic--therapeutic use--TU; Animals; Cancer Vaccines --genetics--GE; Clinical Trials; Cytokines--therapeutic use--TU; Genetic Engineering; Humans; Immunologic Memory--genetics--GE; Neoplasms--genetics --GE; Neoplasms--immunology--IM; Neoplasms--therapy--TH; Recombinant Fusion Proteins--genetics--GE; Recombinant Fusion Proteins--therapeutic use--TU; Vaccines, DNA--genetics--GE; Vaccines, Synthetic--genetics--GE;

-more-

?

Display 4/9/4 (Item 4 from file: 154)
DIALOG(R)File 154:MEDLINE(R)
(c) format only 2005 Dialog. All rts. reserv.
Vaccines, Synthetic--pharmacology--PD
CAS Registry No.: 0 (Adjuvants, Immunologic); 0 (Cancer Vaccines); 0 (Cytokines); 0 (Recombinant Fusion Proteins); 0 (Vaccines, DNA); 0 (Vaccines, Synthetic)
Record Date Created: 20010315
Record Date Completed: 20010412

- end of record -

?

Display 4/9/5 (Item 1 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)
(c) 2005 American Chemical Society. All rts. reserv.

137336364 CA: 137(23)336364p JOURNAL
DNA gene fusion vaccines against cancer
AUTHOR(S): Zhu, Delin; Stevenson, Freda K.
LOCATION: Molecular Immunology Group, Tenovus Laboratory, Southampton University Hospitals Trust, Southampton, UK, SO16 6YD
JOURNAL: Curr. Opin. Mol. Ther. (Current Opinion in Molecular Therapeutics) DATE: 2002 VOLUME: 4 NUMBER: 1 PAGES: 41-48 CODEN: CUOTFO ISSN: 1464-8431 LANGUAGE: English PUBLISHER: PharmaPress Ltd.
SECTION:
CA215000 Immunochemistry
IDENTIFIERS: review DNA vaccine cancer
DESCRIPTORS:
Interleukin 1.beta....
DNA vaccines against cancer in relation to immunogenicity of tumor antigen fused to nonapeptide of

-more-

?

Display 4/9/5 (Item 1 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)
(c) 2005 American Chemical Society. All rts. reserv.
CTLA-4(antigen)....
fusion products, with tumor antigens; tumor antigen fusion proteins for DNA vaccines against cancer
Immunization...
genetic; with tumor antigen fusion proteins in DNA vaccination against

cancer
T cell(lymphocyte)...
helper cell; stimulation by tumor antigen fusion proteins in DNA vaccination against cancer
Antigen presentation... Antigen processing...
of tumor antigen fusion proteins in DNA vaccination against cancer
Human...
tumor antigen fusion proteins for DNA vaccines against cancer
Vaccines...
tumor; tumor antigen fusion proteins for DNA vaccines against cancer
Antigens...

-more-
?

Display 4/9/5 (Item 1 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

tumor-assocd., fusion products; tumor antigen fusion proteins for DNA vaccines against cancer
Antitumor agents...
vaccines; tumor antigen fusion proteins for DNA vaccines against cancer
CAS REGISTRY NUMBERS:
80295-45-0 tumor antigen fusion products; tumor antigen fusion proteins for DNA vaccines against cancer

- end of record -
?

Display 4/9/6 (Item 2 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

132346612 CA: 132(26)346612d PATENT
Pharmaceutical composition, containing fragments of an antigenic protein encoding DNA endowed with anti-tumor effect
INVENTOR(AUTHOR): Parente, Dino; Di Massimo, Anna Maria; De Santis, Rita
LOCATION: Italy
ASSIGNEE: Menarini Ricerche S.p.A.
PATENT: PCT International ; WO 200025827 A2 DATE: 20000511
APPLICATION: WO 99EP7874 (19991018) *IT 98MI2330 (19981030)
PAGES: 56 pp. CODEN: PIXXD2 LANGUAGE: English CLASS: A61K-048/00A
DESIGNATED COUNTRIES: AE; AL; AM; AT; AU; AZ; BA; BB; BG; BR; BY; CA; CH; CN; CR; CU; CZ; DE; DK; DM; EE; ES; FI; GB; GD; GE; GH; GM; HR; HU; ID; IL; IN; IS; JP; KE; KG; KP; KR; KZ; LC; LK; LR; LS; LT; LU; LV; MA; MD; MG; MK; MN; MW; MX; NO; NZ; PL; PT; RO; RU; SD; SE; SG; SI; SK; SL; TJ; TM; TR; TT; TZ; UA; UG; US; UZ; VN; YU; ZA; ZW; AM; AZ; BY; KG; KZ; MD; RU; TJ; TM
DESIGNATED REGIONAL: GH; GM; KE; LS; MW; SD; SL; SZ; TZ; UG; ZW; AT; BE;

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Display 4/9/6 (Item 2 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LU; MC; NL; PT; SE; BF; BJ; CF; CG; CI; CM; GA; GN; GW; ML; MR; NE; SN; TD; TG
SECTION:
CA215002 Immunochemistry
CA203XXX Biochemical Genetics

IDENTIFIERS: DNA cancer vaccine MUC1 tumor antigen
DESCRIPTORS:
Immunostimulants...
adjuvants; DNA or cDNA sequences encoding MUC-1 tumor antigen and fusion protein as vaccine for cancer therapy
Animal cell line...
BT20; DNA or cDNA sequences encoding MUC-1 tumor antigen and fusion protein as vaccine for cancer therapy
Antitumor agents... cDNA sequences... Cytokines... DNA sequences...
Escherichia coli... Fusion proteins(chimeric proteins)... Molecular cloning ... Mucins... Protein sequences...

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DIALOG(R)File 399:CA SEARCH(R)

DNA or cDNA sequences encoding MUC-1 tumor antigen and fusion protein as vaccine for cancer therapy
Mucins...
episialins; DNA or cDNA sequences encoding MUC-1 tumor antigen and fusion protein as vaccine for cancer therapy
Animal cell line...
MCF-7; DNA or cDNA sequences encoding MUC-1 tumor antigen and fusion protein as vaccine for cancer therapy
Plasmids...
pMRS30; DNA or cDNA sequences encoding MUC-1 tumor antigen and fusion protein as vaccine for cancer therapy
Vaccines...
tumor; DNA or cDNA sequences encoding MUC-1 tumor antigen and fusion protein as vaccine for cancer therapy
Antigens...
tumor-assocd.; DNA or cDNA sequences encoding MUC-1 tumor antigen and

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Display 4/9/6 (Item 2 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

fusion protein as vaccine for cancer therapy
DNA...
vaccine; DNA or cDNA sequences encoding MUC-1 tumor antigen and fusion protein as vaccine for cancer therapy
Antitumor agents...
vaccines; DNA or cDNA sequences encoding MUC-1 tumor antigen and fusion protein as vaccine for cancer therapy
CAS REGISTRY NUMBERS:
269048-69-3 269048-70-6 269048-71-7 269048-72-8 269048-73-9
269048-74-0 269048-75-1 269048-76-2 269048-77-3 269048-78-4
269058-31-3 amino acid sequence; DNA or cDNA sequences encoding MUC-1 tumor antigen and fusion protein as vaccine for cancer therapy
60267-61-0 chimeric; DNA or cDNA sequences encoding MUC-1 tumor antigen and fusion protein as vaccine for cancer therapy
9031-11-2DP fusion protein, DNA or cDNA sequences encoding MUC-1 tumor antigen and fusion protein as vaccine for cancer therapy

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Display 4/9/6 (Item 2 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

269048-57-9 269048-58-0 269048-59-1 269048-60-4 269048-61-5
269048-62-6 269048-63-7 269048-64-8 269048-65-9 269048-66-0
269048-67-1 269048-68-2 nucleotide sequence; DNA or cDNA sequences encoding MUC-1 tumor antigen and fusion protein as vaccine for cancer therapy
269050-06-8 269050-07-9 269050-08-0 269050-09-1 269050-10-4
269050-11-5 269050-12-6 269050-13-7 269050-14-8 269050-15-9
269050-16-0 269050-17-1 269050-18-2 269050-19-3 269050-20-6
269050-21-7 269050-22-8 269050-23-9 269050-24-0 269050-25-1
269050-26-2 269050-27-3 269053-27-2 unclaimed nucleotide sequence; pharmaceutical compn., contg. fragments of an antigenic protein encoding DNA endowed with anti-tumor effect

- end of record -

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Display 4/9/7 (Item 1 from file: 34)
DIALOG(R)File 34:SciSearch(R) Cited Ref Sci

10170050 Genuine Article#: 492DP Number of References: 35
Title: An oral DNA vaccine against human carcinoembryonic antigen (CEA) prevents growth and dissemination of Lewis lung carcinoma in CEA transgenic mice
Author(s): Niethammer AG; Primus FJ; Xiang R; Dolman CS; Ruehlmann JM; Ba Y ; Gillies SD; Reisfeld RA (REPRINT)
Corporate Source: Scripps Clin & Res Inst,Dept Immunol,La Jolla//CA/92037 (REPRINT); Scripps Clin & Res Inst,Dept Immunol,La Jolla//CA/92037; Vanderbilt Univ,Med Ctr,Nashville//TN/37232; Lexigen Pharmaceut Corp,Lexington//MA/02173
Journal: VACCINE, 2001, V20, N3-4 (NOV 12), P421-429
ISSN: 0264-410X Publication date: 20011112
Publisher: ELSEVIER SCI LTD, THE BOULEVARD, LANGFORD LANE, KIDLINGTON, OXFORD OX5 1GB, OXON, ENGLAND
Language: English Document Type: ARTICLE

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Display 4/9/7 (Item 1 from file: 34)
DIALOG(R)File 34:SciSearch(R) Cited Ref Sci

Geographic Location: USA
Journal Subject Category: IMMUNOLOGY; MEDICINE, RESEARCH & EXPERIMENTAL; VETERINARY SCIENCES
Abstract: A DNA vaccine encoding human carcinoembryonic antigen (CEA) broke peripheral T-cell tolerance toward this tumor self-antigen expressed by Lewis lung carcinoma stably transduced with CEA in C57BL/6J mice transgenic for CEA. This vaccine, delivered by oral gavage with an attenuated strain of Salmonella typhimurium (SL7207), and boosted with an antibody-IL2 fusion protein, induced tumor-protective immunity mediated by MHC class I anti gen-restricted CD8(+) T cells, resulting in eradication of subcutaneous tumors in 100% of mice and prevention of experimental pulmonary metastases in 75% of experimental animals. Both CTL and antigen-presenting dendritic cells were activated as indicated by a decisive increase in their respective activation markers CD2,

CD25, CD28 as well as CD48 and CD80. The antitumor effects of this CEA-based DNA vaccine obtained in prophylactic settings, suggest that

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Display 4/9/7 (Item 1 from file: 34)
DIALOG(R)File 34:SciSearch(R) Cited Ref Sci
(c) 2005 Inst for Sci Info. All rts. reserv.
this approach could lead to the rational design of effective treatment modalities for human lung cancer. (C) 2001 Elsevier Science Ltd. All rights reserved.
Descriptors--Author Keywords: carcinoembryonic antigen (CEA) ; transgenic mice ; antitumor
Identifiers--KeyWord Plus(R): ATTENUATED SALMONELLA-TYPHIMURIUM; TUMOR-ANTIGENS; T-CELLS; FUSION PROTEINS; COLON-CARCINOMA; CARRIER STRAINS; CANCER; LYMPHOCYTES; IDENTIFICATION; INTERLEUKIN-2
Cited References:
BECKER JC, 1996, V183, P2361, J EXP MED
BECKER JC, 1996, V93, P2702, P NATL ACAD SCI USA
BOON T, 1994, V12, P337, ANNU REV IMMUNOL
CLARKE P, 1998, V58, P1469, CANCER RES
COLEY WB, 1991, V262, P3, CLIN ORTHOPAEDICS
DARJI A, 1997, V91, P765, CELL
DARJI A, 2000, V27, P341, FEMS IMMUNOL MED MIC

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Display 4/9/7 (Item 1 from file: 34)
DIALOG(R)File 34:SciSearch(R) Cited Ref Sci
(c) 2005 Inst for Sci Info. All rts. reserv.
GILLIES SD, 1998, V160, P6195, J IMMUNOL
KAWAKAMI Y, 1996, P3, IMP ADV ONC
KAWAKAMI Y, 1994, V91, P6458, P NATL ACAD SCI USA
LIU Y, 1992, V89, P3845, P NATL ACAD SCI USA
LODE HN, 2000, V105, P1623, J CLIN INVEST
MALOY KJ, 2001, V98, P3299, P NATL ACAD SCI USA
MARINCOLA FM, 1995, V13, P1110, J CLIN ONCOL
MEDINA E, 2000, V30, P768, EUR J IMMUNOL
MEDINA E, 1999, V29, P693, EUR J IMMUNOL
MOINGEON P, 2001, V19, P1305, VACCINE
MORALES A, 1976, V116, P180, J UROLOGY
OFFRINGA R, 2000, V12, P576, CURR OPIN IMMUNOL
PAGLIA P, 1998, V92, P3172, BLOOD
PAN ZK, 1999, V55, P4776, CANCER RES
ROSENBERG SA, 1996, V88, P1635, J NATL CANCER I
RUDD CE, 1996, V4, P527, IMMUNITY

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Display 4/9/7 (Item 1 from file: 34)
DIALOG(R)File 34:SciSearch(R) Cited Ref Sci
(c) 2005 Inst for Sci Info. All rts. reserv.
SCOTT AM, 1997, V9, P717, CURR OPIN IMMUNOL
SHARKEY RM, 1990, V50, P2823, CANCER RES
THOMPSON JA, 1991, V5, P344, J CLIN LAB ANAL
TSANG KY, 1995, V87, P982, J NATL CANCER I
VANDENEYNDE B, 1995, V7, P674, CURR OPIN IMMUNOL

VANPEL A, 1995, V145, P229, IMMUNOL REV
VELTRI SE, 1996, V14, P164, STEM CELLS
WANG RF, 1999, V170, P85, IMMUNOL REV
WONG FS, 1996, V183, P67, J EXP MED
WONG JYC, 1999, V5, P3224, CLIN CANCER RES
XIANG R, 1999, V163, P3676, J IMMUNOL
XIANG R, 2001, V7, P856, CLIN CANCER RES

- end of record -

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Display 4/9/8 (Item 1 from file: 73)
DIALOG(R)File 73:EMBASE

12865894 EMBASE No: 2004458183
Immunotherapeutic strategies for hepatocellular carcinoma
Butterfield L.H.
AUTHOR EMAIL: butterfieldl@upmc.edu
Gastroenterology (GASTROENTEROLOGY) (United States) 2004, 127/SUPPL. (S232-S241)
CODEN: GASTA ISSN: 0016-5085
PUBLISHER ITEM IDENTIFIER: S0016508504016178
DOCUMENT TYPE: Journal ; Conference Paper
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH
NUMBER OF REFERENCES: 46

There is a continuing need for innovative, alternative therapies for hepatocellular carcinoma (HCC). Immunotherapy for cancer is attractive because of the exquisite specificity of the immune response. Activation of

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Display 4/9/8 (Item 1 from file: 73)
DIALOG(R)File 73:EMBASE

an HCC-specific response can be accomplished by strategies targeting tumor-associated self-antigens (for example, alpha-fetoprotein [AFP]). Gene array studies have added to the list of HCC-specific gene products that can be targeted. Alternatively, the immune response can be targeted against viral antigens in those patients infected with hepatitis B or C virus. Uncharacterized and mutated antigens can also be targeted with whole tumor cell or tumor lysate-based immunization strategies or with vectors coding for genes that make the tumor immunogenic, allowing the immune system to naturally evolve specificity against immunogenic target antigens. Strategies being investigated in animal models include increasing tumor immunogenicity by targeting cytokines or costimulatory molecules to tumor; immunization with tumor cells fused with antigen-presenting cells; adoptive transfer of viral antigen-specific T cells; and targeting AFP-expressing HCC cells by DNA, adenovirus, peptide, and dendritic cell (DC) strategies. Strategies that have been tested in human clinical trials include adoptive transfer of lymphocytes and autologous tumor-pulsed DC as well as 2

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Display 4/9/8 (Item 1 from file: 73)
DIALOG(R)File 73:EMBASE

AFP-based strategies: AFP-derived peptides in Montanide and AFP peptides pulsed onto autologous DC. These trials, testing novel immune-based interventions in HCC subjects, have resulted in immunologic responses and have impacted recurrence and survival in HCC subjects.

DRUG DESCRIPTORS:
tumor antigen; alpha fetoprotein--clinical trial--ct; alpha fetoprotein --drug dose--do; alpha fetoprotein--drug therapy--dt; alpha fetoprotein --pharmacology--pd; gene product; virus antigen; plasmid DNA; DNA vaccine; CD40 ligand--pharmacology--pd; Flt3 ligand--pharmacology--pd; tumor vaccine ; antineoplastic agent--clinical trial--ct; antineoplastic agent--drug combination--cb; antineoplastic agent--drug therapy--dt; antineoplastic agent--intraarterial drug administration--ia; antineoplastic agent --pharmacology--pd; doxorubicin--clinical trial--ct; doxorubicin--drug therapy--dt; doxorubicin--pharmacology--pd; cytokine--clinical trial--ct; cytokine--drug combination--cb; cytokine--drug therapy--dt; cytokine

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Display 4/9/8 (Item 1 from file: 73)
DIALOG(R)File 73:EMBASE
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--intraarterial drug administration--ia; cytokine--intravenous drug administration--iv; cytokine--pharmacology--pd; cytokine--subcutaneous drug administration--sc; gamma interferon--clinical trial--ct; gamma interferon --drug combination--cb; gamma interferon--drug therapy--dt; gamma interferon--intraarterial drug administration--ia; gamma interferon --pharmacology--pd; gamma interferon--subcutaneous drug administration--sc; granulocyte macrophage colony stimulating factor--clinical trial--ct; granulocyte macrophage colony stimulating factor--drug combination--cb; granulocyte macrophage colony stimulating factor--drug therapy--dt; granulocyte macrophage colony stimulating factor--subcutaneous drug administration--sc; interleukin 2--clinical trial--ct; interleukin 2--drug combination--cb; interleukin 2--drug therapy--dt; interleukin 2 --intraarterial drug administration--ia; interleukin 2--intravenous drug administration--iv; interleukin 2--pharmacology--pd; interleukin 12--drug therapy--dt; interleukin 4--pharmacology--pd; tumor necrosis factor alpha --clinical trial--ct; tumor necrosis factor alpha--drug combination--cb;

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Display 4/9/8 (Item 1 from file: 73)
DIALOG(R)File 73:EMBASE
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tumor necrosis factor alpha--drug therapy--dt; BCG vaccine--clinical trial --ct; BCG vaccine--drug therapy--dt; BCG vaccine--intradermal drug administration--dl; keyhole limpet hemocyanin--clinical trial--ct; keyhole limpet hemocyanin--drug therapy--dt; keyhole limpet hemocyanin --pharmacology--pd; adjuvant
MEDICAL DESCRIPTORS:
*liver cell carcinoma--drug therapy--dt; *liver cell carcinoma--therapy--th ; *cancer immunotherapy
immune response; gene targeting; Hepatitis B virus; Hepatitis C virus; hepatitis B--etiology--et; hepatitis C--etiology--et; mutation; tumor cell; cell lysate; gene vector; antigen presenting cell; adoptive transfer; antigen specificity; T lymphocyte; dendritic cell; Adenovirus; lymphocyte transfer; cancer survival; cancer recurrence; cancer immunization; drug effect; cytotoxic lymphocyte; lymphokine activated killer cell; liver

metastasis--therapy--th; tumor associated leukocyte; colorectal cancer --drug therapy--dt; colorectal cancer--therapy--th; human; nonhuman;

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Display 4/9/8 (Item 1 from file: 73)

DIALOG(R)File 73:EMBASE

clinical trial; conference paper; priority journal
CAS REGISTRY NO.: 226713-27-5 (CD40 ligand); 171404-15-2 (Flt3 ligand); 23214-92-8, 25316-40-9 (doxorubicin); 82115-62-6 (gamma interferon); 85898-30-2 (interleukin 2); 138415-13-1 (interleukin 12)
SECTION HEADINGS:
016 Cancer
026 Immunology, Serology and Transplantation
030 Clinical and Experimental Pharmacology
037 Drug Literature Index
048 Gastroenterology

- end of record -

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Display 4/9/9 (Item 1 from file: 357)

DIALOG(R)File 357:Derwent Biotech Res.

0320122 DBR Accession No.: 2003-21262
Transcription factor Fos-related antigen 1 is an effective target for a breast cancer vaccine - attenuated Salmonella typhimurium and plasmid-mediated polyubiquitin fusion protein and interleukin-18 gene transfer for mamma cancer nucleic acid vaccine and gene therapy
AUTHOR: LUO YP; ZHOU H; MIZUTANI M; MIZUTANI N; REISFELD RA; XIANG R
CORPORATE AFFILIATE: Scripps Res Inst
CORPORATE SOURCE: Xiang R, Scripps Res Inst, Dept Immunol, 10666 N Torrey Pines Rd, La Jolla, CA 92037 USA
ISSN: 0027-8424 CODEN: 0027-8424; PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AME; (2003) 100, 15, 8850-8855
LANGUAGE: English
ABSTRACT: AUTHOR ABSTRACT - Protection against breast cancer was achieved with a DNA vaccine against murine transcription factor Fos-related antigen 1, which is overexpressed in aggressively proliferating D2F2

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Display 4/9/9 (Item 1 from file: 357)

DIALOG(R)File 357:Derwent Biotech Res.

murine breast carcinoma. Growth of primary s.c. tumor and dissemination of pulmonary metastases was markedly suppressed by this oral DNA vaccine, carried by attenuated Salmonella typhimurium, encoding murine Fos-related antigen 1, fused with mutant polyubiquitin, and cotransformed with secretory murine IL-18. The life span of 60% of vaccinated mice was tripled in the absence of detectable tumor growth after lethal tumor cell challenge. Immunological mechanisms involved activation of T, natural killer, and dendritic cells, as indicated by up-regulation of their activation markers and costimulatory molecules. Markedly increased specific target cell lysis was mediated by both MHC class I-restricted CD8(+) T cells and natural killer cells isolated

from splenocytes of vaccinated mice, including a significant release of proinflammatory cytokines IFN-gamma and IL-2. Importantly, fluorescence analysis of fibroblast growth factor 2 and tumor cell-induced vessel growth in Matrigel plugs demonstrated marked suppression of angiogenesis only in vaccinated animals. Taken together, this

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